KLEMENT, I.; ARUVEEL, E.

Chemical composition of the nonaromatic part of Kivioli chamber furnace gas benzine. p. 180.

EESTI LOODUS (Eesti NSV Teaduste Akadeemja) Tartu, Estonia. Vol. 8, no. 3, 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 12, Dec. July, 1959.
Uncl.

KLESMENT, I.R.

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(MIRA 17:3)

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(MIRA 17:3)

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"Main Trend in Latin American Industrial Development After the Second World War."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

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Veterinariya vol. 38, no. 7, July 1961 p. 80.

KLESMET, O.I.; VOLIK, F.Ye., veter. vrach; MAKRUSHIN, P.V., kand. veter. nauk; LOZHKIN, N.I., kand. biolog. nauk; NIKOL'SKIY, B.S., nauchnyy sotrudnik

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1. Respublikanskaya veterinarno-bakteriologicheskaya laboratoriya Latviyskoy SSR (for Klesmet). 2. Veterinarno-bakteriologicheskaya laboratoriya, Melitopol' (for Volik). 3. Saratovskiy zooveterinarnyy institut (for Makrushin). 4. Vsesoyuznyy institut eksperimental'noy veterinarii (for Loshkin, Nikol'skiy).

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KOLESNIK, M.P., provizor; YEMEL'YANOV, N.I., slesar' (Kronshtadt)

Mechanical washing of vessels used in drugstores. Apt. delo 9 no.6: 55-57 N-D '60. (MIRA 13:12)

1. Voyenno-morskoy ordena Lenina gospital' No.35.
(WASHING MACHINES)

PODOL'SKIY, M.V.; KLESNIKOVA, L.I.; KHOLCHEV, N.V.

Improved apparatus for the production of gamma globulin. Mauch. osn. proizv. bakt. prep. 10:280-292 '61. (MIRA 18:7)

1. Moskovskiy institut epidemiologii, mikrobiologii i gigiyeny.

KLESNIL, M.; [redacted]

TECHNOLOGY

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KLESNIL, M.; RYS, P. Initial stages of fatigue in carbon steels. p. 1116

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 5
May 1959, Unclass.

CZECH/34-59-8-7/16

AUTHORS: Molčík, Marian, Engineer and Klesnil, Mirko, Candidate of Technical Sciences, Engineer

TITLE: Application of Electron Microscopy for Following the Kinetics of Phenomena in Areas Chosen in Advance

PERIODICAL: Hutnické listy, 1959, 14 Nr 8, pp 688 - 692

ABSTRACT: The authors describe a method of preparation of two-stage collodion-carbon replicas which are characterised by a high resolution and permit observing the same spot of a specimen under various phases of loading. The method was applied to the study of the development of fatigue in carbon steel and it helped to provide additional knowledge on the early stages of development of coherence failures during alternating stresses. Figure 1 shows a sketch of the test specimen with the spot under consideration marked. The sketch, Figure 2, shows the applied method of producing the primary replica and the sketches, Figure 4, show the processes of preparation of the two-stage replica. Optically obtained and electron-microscopically obtained microphotographs are included, covering the range of 3 000 to 180 000 loading cycles.

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CZECH/34-59-8-7/16

Application of Electron Microscopy for Following the Kinetics of Phenomena in Areas Chosen in Advance

There are 8 figures and 6 references, of which 2 are Soviet, 2 Czech, 1 German and 1 English.

ASSOCIATION: Laboratoř pro studium vlastností kovů, ČSAV, Brno (Laboratory for Studying the Properties of Metals, Czechoslovak Ac.Sc., Brno)

SUBMITTED: April 29, 1959

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Card 2/2

2/037/60/000/02/002/018
E024/E320

AUTHOR: Klesnil, Mirko

TITLE: Permanent Slip Lines in Steel During Variable Loading

PERIODICAL: Československý časopis pro fysiku, 1960, Nr 2, pp 98 - 101 + 2 plates

ABSTRACT: Permanent slip lines were studied in two carbon steels, Czech standards 12040 (0.4% C) and 12010 (0.09% C). Samples shaped as in Figure 1 were subjected to alternating bending stresses. The fatigue limit of steel 12040 was $\pm$ 25.5 kiloponds/mm^2 and of steel 12010 $\pm$ 19.0 kp/mm^2. The metallographic preparation of the samples and the method of preparing the replicas are described in Ref 3. Figure 2a (p 188a) shows one of the slip lines which are formed on the surface of the sample. The slip line contains a large number of microscopic disturbances having a ferritic structure. Figure 2b (in which negative shadowing was used) shows that the randomly orientated, very dark lines are microscopic cracks and that the structures in shadow may be considered as microscopic disturbances of the bulk metal.
After polishing and etching the sample, these slip lines

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Permanent Slip Lines in Steel During Variable Loading

reappear. Figure 3a shows a permanent slip line, running across 4 ferritic grains, which remained visible even after the removal of a 4 μ layer of the material. The change in direction of the slip lines is characteristic of steels with large carbon contents. Figure 3b clearly shows that, on further deformation, the slip line has widened into an obvious crack.

Figure 4a shows a permanent slip line resembling two slip systems connected by cross slip. The width of the permanent slip lines varies between 0.5 and 1.0 μ ; some of the lines were no longer than 3 μ. It was found that permanent slip lines are produced exclusively on the surface of the sample, from which they spread into the interior, terminating at pearlite grains. The slip lines grow under deformation to a critical length and then develops into a crack. The relief of a surface formed by rupture within the disturbed region of the ferrite is shown in Figure 7a. When the crack reaches the boundaries of the permanent slip line, it starts moving into the mass of the

Permanent Slip Lines in Steel During Variable Loading

material. The surface of a sample which ruptured by the direct development of a crack is shown in Figure 7b. The slip lines occurring during alternating deformation are basically different from crystallographic plastic deformation occurring with static loads.

The formation of permanent slip lines is considered as the first stage of the fatigue process, which can occur in some sample after the application of only 1% of the total number of stress cycles necessary for the failure of the sample. Permanent slip lines are not, in the initial stages, cracks. The development of the disturbed bands having a ferritic structure can be considered as the second phase of the fatigue process. When the permanent slip line attains its critical size (with steel 12041, approximately 100 μ), a crack develops which spreads through the structure and leads to failure. The present observations are in good agreement with Thompson (Ref 5) and Plateau et al (Ref 6).

There are 7 figures and 6 references, of which 4 are English, 1 Czech and 1 French.

Z/037/60/000/02/002/018
E024/E320

Permanent Slip Lines in Steel During Variable Loading

ASSOCIATION: Laboratoř pro studium vlastností kovů ČSAV, Brno
(Laboratory for the Study of Properties of Metals, ČSAV, Brno)

SUBMITTED: July 13, 1959

Card 4/4

18.8200

68261

CZECH/34-60-2-5/27

AUTHOR: Klesnil, Mirko, Candidate of Technical Sciences, Engineer

TITLE: Study of Fatigue Failures in Steels with Various Carbon Contents

PERIODICAL: Hutnické listy, 1960, Nr 2, pp 120 - 124

ABSTRACT: Brief information is given on fatigue phenomena after annealing in carbon steels with various contents of carbon. The work described in the paper forms a part of the research project of the Laboratory for Studying the Properties of Metals, ČSAV, Brno. The specimens were produced from normalisation annealed steels ČSN 12010 (0.09% C), ČSN 12040 (0.4% C) and ČSN 19152 (0.8% C). After manufacture, the specimens, of which Figure 1 shows a dimensional sketch, were annealed in vacuum at 600 °C. These specimens were intedned for metallographic study and investigation of the fracture surfaces. Other specimens (sketch, Figure 2) were made for measuring the degree of hardening and for X-ray diffraction studies; these were annealed in vacuum at 950 °C and then allowed to cool in the furnace. In this way, a suitable metallographic grain size was obtained. The specimens were

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Study of Fatigue Failures in Steels with Various Carbon Contents

loaded symmetrically with an alternating bending cycle by means of an elastic dynamometer with an adjustable deflection amplitude. The experiments were carried out at normal temperatures without cooling of the specimens. The Wöhler curves for all the investigated types of steel are graphed in Figure 3. The fatigue limits were as follows: $\pm$ 19 kg/mm^2 for the steel ČSN 12010; $\pm$ 25.5 kg/mm^2 for the steel ČSN 12040 and $\pm$ 31.5 kg/mm^2 for the steel ČSN 19152. The tests consisted of cyclic loading of the specimens and metallographic and X-ray investigation during various phases of the loading, measuring simultaneously the amplitudes of the stresses and strains; one of the surfaces of the specimens was prepared for metallographic study by mechanical polishing and chemical etching. These tests were supplemented by fractographic studies. In Figure 4 the changes in the stress amplitude as a function of the number of cycles during the process of stress-hardening of the steel ČSN 12010 are graphed.

Study of Fatigue Failures in Steels with Various Carbon Contents

Figure 6 shows the change in the stress-amplitude in the case of alternate loading, 6 500 cycles, of cold-worked steel. X-ray diffraction pictures are reproduced in Figure 5. Some of the microphotos (with magnifications of 11 000 to 22 000) obtained in the metallographic studies are reproduced in Figures 7-13. Two fracture photographs are reproduced in Figures 14 and 15. The obtained results are discussed and the following conclusions are arrived at. The hardening is pronounced in the elastic-plastic zone; in the phenomenologically elastic zone, which includes almost an entire branch of the Wöhler curve, no hardening effect could be proved. In the case of stresses in the elastic range above the fatigue limit only slight changes in some reflexes were observed on X-ray diffraction pictures. These phenomena, which occur only after a large number of cycles, are not connected with fragmentation in the same sense as in the case of static loading and rather reflect the disturbed ferrite bands. Optical and electron microscope studies have shown that these bands, which are characterised by permanent slip lines, occur at the

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Study of Fatigue Failures in Steels with Various Carbon Contents

surface of specimens in the deformation relief of the slip lines. If they achieve critical dimensions a micro crack will form which extends, as a result of the high stress concentration, into the basic metal substance and will ultimately lead to a fracture. There are 15 figures and 10 references, of which 3 are Czech, 2 English, 3 German, 1 Soviet and 1 international.

ASSOCIATION: Laboratoř pro studium vlastností kovů ČSAV, Brno (Laboratory for the Study of the Properties of Metals, ČSAV, Brno)

SUBMITTED: July 27, 1959

Card 4/4

85192

18.7110

Z/034/60/000/011/005/009
E073/E335

AUTHORS: Klesnil, Mirko and Ryš, Přemysl

TITLE: Precipitation Hardening of Low-carbon Steels

PERIODICAL: Hutnické listy, 1960, No. 11, pp. 867 - 876

TEXT: For studying the structural changes in saturated alpha-iron, a low-carbon steel was chosen which contained 0.05% C and 0.0042% N. First, the steel was annealed at 1 000 °C for one hour and then it was allowed to cool slowly in the furnace for a duration of 24 hours. As a result of this a suitable grain size of 0.01 mm was obtained. The specimens were in the shape of 4 x 15 x 40 mm plates. These were annealed for one hour at 700 °C and then rapidly cooled in water at 20 °C. Following that, they were electrolytically polished in an electrolyte containing 225 ml. CH_3COOH, 5 ml. H_2O, 20 ml. $HClO_4$ and were etched for 30 sec by means of a 2% nital solution. Hardening was effected in the temperature range 23 - 128 °C; the specimens were heated in a thermostat in which the temperature was maintained with an accuracy of ± 0.05 °C. The hardness

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Precipitation Hardening of Low-carbon Steels

was measured by the Vickers method and as the resulting values the arithmetic mean of 10 measurements was taken and the mean square error calculated, which varied between ± 0.5 to 2 H units. The structural changes were studied on a Zeiss Neophot microscope and by means of a table electron microscope, Tesla BS-242, using two-stage colloidal carbon replicas which were shaded by means of gold and palladium. On the basis of the results, which are described in considerable detail, the following conclusions are arrived at: hardening of low-carbon steels with a small content of nitrogen proceeds by formation of the carbide phase. The activation energy of the precipitation process has been determined and it was found that the value is very close to the activation energy of diffusion of carbon in alpha-iron, which indicates that carbon diffusion controls the progress of hardening of the investigated steel. The electron microscope enables following the changes in the structure of the solid solution of alpha-iron as a function of time and of the hardening conditions. Determination of the beginning of the precipitation itself, i.e. of the separation of non-coherent formations, is very difficult.

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Precipitation Hardening of Low-carbon Steels

Pronounced precipitates were determined only on the descending sections of the hardness curves; the ascending part and the peak part of the curves correspond to the pre-precipitation state of the nonhomogeneous solid solution or of coherent precipitates. After cold-working and combined hardening the hardness values were higher and the hardness and the structure were considerably more stable than in the case of ordinary hardening at a given elevated temperature and of hardening unworked (undeformed) steel. Both these phenomena are attributed to the considerable nucleation ability of the solid alpha-solution. There are 16 figures and 18 references: 3 international, 3 German, 9 English and 3 Czech.

ASSOCIATION: Laboratoř pro studium vlastností kovů ČSAV, Brno (Laboratory for the Study of the Properties of Metals, ČSAV, Brno)

SUBMITTED: September 20, 1960

Card 3/3

2/1146

18.8200 also 2807

Z/034/61/000/008/003/005
E073/E535

AUTHORS: Klesnil, Mirko, Docent Engineer Candidate of Science and Rys, Premysl, Docent Doctor Engineer Doctor of Science

TITLE: Precipitation in low carbon steel during cyclic loading

PERIODICAL: Hutnické listy, 1961, No.8, pp.565-572

TEXT: Published results of P. Lukáš (Ref.11: Symposium on Fatigue of Metals, Prague, 1960), N. Thompson and N.J. Wadsworth (Ref.13: Advances Phys. VII, 1958, p.72) and others indicate that during cyclic loading the range of diffusion of interstitial atoms increases considerably in Fe-C alloys. The specific fatigue characteristics of these alloys prove that diffusion of interstitial atoms is a process which controls the formation and development of fatigue caused breaks in the cohesion of the ferrite. The authors carried out experiments on two types of steel: a low carbon steel containing 0.05% C and 0.0042% N and the steel ČSN 12010 [Abstractor's Note: composition of this steel - 0.06 to 0.13% C, max 0.60% Mn, max 0.35% Si, max 0.04% P,

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max 0.04% S, max 0.07% P + S]. The low carbon steel was first annealed at 1000°C for one hour and then slowly cooled in the furnace for a period of 24 hours. By this treatment an almost equilibrium state was achieved with a suitable grain size (about 0.01 mm). From this material test specimens were made, Fig.1. Some of the specimens were left in the initial state and some were annealed at 700°C for one hour and then rapidly quenched in water at 20°C. All the specimens were ground and electrolytically polished prior to the tests. The surface zone, which was plastically deformed during machining and grinding, was removed by polishing off electrolytically a 50 μ thick layer. The specimens were then subjected to alternate bending at a frequency of 400/min on a test machine designed by the authors. Quenching of each specimen from a temperature of 700°C into water of 20°C was carried out in each case immediately prior to the mechanical tests. The plotted Wöhler curves are reproduced in Fig.2 for the specimens in the annealed (curve 1) and the quenched (curve 2) states. The specimens from the steel ČSN 12010 were first normalized (grain size about 0.02 mm) and then subjected to the

same machining and heat treatment as the low carbon steel specimens. Following that, they were subjected to alternate bending at a frequency of 1470/min on a Schenck-WEBI machine. The Wöhler curves for the steel in the annealed state (curve 1) and in the quenched state (curve 2) are plotted in Fig.4. Structural changes caused by the cyclic stresses and additional annealing were investigated on an optical microscope and on an electron microscope. In the latter, two-stage colloid-carbon replicas were used which were shaded with gold and paladium. For additional hardening after loading the specimens were heated in a thermostat where the temperature was maintained with an accuracy of $\pm$0.05°C. For the hardness values, the arithmetic average of ten measurements was taken and for this average the mean square error was calculated. For the macrohardness it varied between $\pm$0.5 and 2 H_V; for the microhardness it varied between $\pm$1 and 3.5 H_V. The dependence of the hardness H_V on time τ(min) on quenched specimens of the steel with 0.05% C exposed to the temperatures 23, 97 and 128°C is characteristic for the precipitation process (Fig.5). On cyclic loading a considerable increase in hardness

of the ferrite grains affected by alternate plastic deformation was observed after a relatively short time. Fig.7 shows the microhardness of the deformed grains of the 0.05% C steel water quenched from 700°C as a function of the number of cycles for a stress amplitude of σ_a = 27.8 kp/mm^2. Curves 1 and 1a represent the microhardness of grains subjected to alternate plastic deformation. The curves 2 and 2a represent the microhardness of undeformed grains. Curve 3 is the microhardness achieved by direct hardening at 97°C (righthand plot - time in hours). A similar increase in hardness was observed for σ_a = $\pm$30.0 kp/mm^2. The results indicate that the hardness increases the more the higher the stress amplitude. After fracture, all the specimens used for obtaining the Wohler curves were subjected to hardness tests. It was found that with decreasing stress amplitude the hardness values of the loaded and non-loaded sections get closer which means that the intensity of precipitation hardening decreases with decreasing stress amplitude. The structure of the slip bands was studied on specimens loaded with σ_a = 31.5 kp/mm^2, i.e. 3.28% above the fatigue limit. It was found that low frequency cyclic loading of

a saturated solid solution of α-iron brings about precipitation decomposition and formation of a carbide phase in the slip bands even without any increase in the temperature. The precipitation results in a pronounced increase of the fatigue limit as compared to annealed steel which is almost in the equilibrium state. Similarly to precipitation of carbides during annealing at 97 and 128°C, carbides form on the ascending branch of the hardness curve which approaches asymptotically the limit value. The increase in hardness is most probably due to precipitation hardening in the slip bands. The increase in hardness caused by additional annealing at 97 and 128°C is due mainly to the undeformed matrix. The hardness curves and the morphological appearance of the structure correspond to combined hardening. The fact that the character of the precipitation decomposition of the saturated α-solid solution during static and during cyclic stresses differs indicates specific properties of the structure of permanent slip bands, which form during alternating strain in ferrite grains, which are the nuclei for fatigue breaks in the cohesion. There are 17 figures and 21 references: 5 Soviet-bloc and 16 non-Soviet-bloc. The four latest English-language references read as follows:

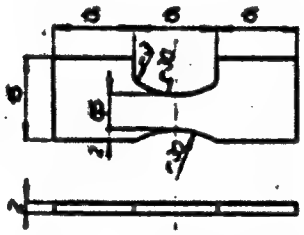
Precipitation in low carbon ... Z/034/61/000/008/003/005
E073/E535

H.A.Lipsitt and G.T.Horne, ASTM 57/1957), p.587; J.C.Levy and G.M.Sinclair, ASTM 55(1955),p.866; N.Thompson and N.J.Wadsworth, Advances Phys. VII (1958) p.72; P.J.E.Forsyth, Proc.Roy.Soc. A. 242 (1957), p.198.

ASSOCIATION: Laboratoř pro studium vlastností kovů ČSAV, Brno
(Laboratory for the Study of the Properties of Metals, ČSAV, Brno)

SUBMITTED: February 8, 1961

Fig.1



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KLESNIL, Mirko; HOLZMANN, Miloslav; RYS, Premysl

Regeneration process in the Fe-C-N alloys subsequent to static and cyclic deformation. Hut listy 17 no.4:265-272 Ap '62.

1. Laborator pro studium vlastnosti kovu, Ceskoslovenska akademie ved, Brno.

KLESNIL, Mirko, doc., ins., C.Sc.; RYS, Premysl, do., dr., ins., Dr.Sc.

Precipitation in low-carbon cyclic loaded steel. Hut listy 16 no.8:565-572 Ag '61.

1. Laborator pro studium vlastnosti kovu, Ceskoslovenska akademie ved, Brno.

Z/032/63/013/003/002/006
E073/E135

AUTHORS: Holzmann M., and Klesnil M.

TITLE: Influence of precipitation hardening on the mechanical properties of carbon steels

PERIODICAL: Strojírenství, v.13, no.3, 1963, 193-196 and 207

TEXT: The aim of the work was to determine the behavior of precipitation hardened steels during static, cyclic and impact loading for the purpose of elucidating the effect of ageing on the operating properties. The experiments were carried out using a low carbon steel and a medium carbon steel, the compositions of which were as follows: Steel ČSN 12010 - 0.11% C, 0.32% Si, 0.45% Mn, 0.028% P, 0.024% S, 0.0011% N_2, 0.0056% O_2. Steel ČSN 12040 - 0.32% C, 0.28% Si, 0.79% Mn, 0.052% P, 0.019% S, 0.0073% N_2, 0.0022% O_2. The steel ČSN 12010 was normalization annealed to a grain size of 0.02 mm. The steel ČSN 12040 was annealed for one hour at 1100 °C and then slowly cooled with the furnace. This was done to achieve a suitable grain size for measuring the microhardness of the ferrite. Tensile and impact specimens were produced from both steels. Some of the

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Influence of precipitation hardening... Z/032/63/013/003/002/006
E073/E135

specimens were tested in their original state; others were annealed for 30 min at 700 °C and then rapidly quenched in water of 18 °C. The specimens were precipitation hardened at 20 °C. The tensile tests were performed at room temperature. The fatigue limit of the steel ČSN 12010 was tested on several specimens of different design using a micropulsator, designed by the authors of this paper, and capable of producing alternating, tensile and compressive stresses with a maximum force of ± 600 kg at a frequency of 1470 cycles per minute. The shape of the specimens was such that the loading was exactly concentric. In addition, the macro- and micro-hardness were measured during the experiments. The results confirmed the known fact that ageing of saturated solid solutions of α-iron leads to an increase of the yield point and the strength of the steel and simultaneously to a lowering of the ductility. They also confirmed that precipitation-hardened, low-carbon steels are prone to the formation of brittle fractures. On the other hand, it was found that precipitation hardening does not increase the proneness of the steel to fatigue failures, on the contrary, ageing of a saturated solid solution of α-iron brings about a considerable increase in the fatigue limit of the steel.

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Influence of precipitation hardening.. Z/032/63/013/003/002/006
E073/E135

Results of the notch sensitivity of annealed and precipitation-hardened steels confirmed that precipitation hardening has almost no influence on the notch sensitivity.
There are 6 figures and 3 tables.

ASSOCIATION: Laboratoř pro studium vlastností kovů ČSAV, Brno
(Laboratory for the study of the properties of metals, ČSAV, Brno)

Card 3/3

KLESNIL, Mirko, doc., ing., ScC.

Influence of a carbonitride layer on the fatigue process of low-carbon steel. Hut listy 18 no.5:349-350 My '63.

1. Laborator pro studium kovu, Ceskoslovenska akademie ved, Brno.

ACCESSION NR: AP4017930 2/0065/64/000/001/0080/0098

AUTHOR: Klesnil, Mirko; Holzmann, Miloslav (Gol'tsman, Miloslav)

TITLE: Changes in mechanical characteristics and the logarithmic decrement of damping in the cyclic loading of alpha-iron with different C + N contents

SOURCE: Kovove materialy, no. 1, 1964, 80-96

TOPIC TAGS: mechanical characteristic, logarithmic damping decrement, cyclic loading, alpha-iron, softening, hardening, damp-hydrogen atmosphere, stress amplitude, resonance frequency, deformation, dislocation density, slide-area density, nucleation point, cohesion failure

ABSTRACT: The paper shows the effect of the interstitial C + N atom content on changes in the mechanical characteristics of a Fe-C-N alloy under cyclic loading. Softening occurs when samples of low-carbon steel are used (dislocations before loading are firmly blocked by the C + N atoms). After annealing in a moist-hydrogen atmosphere the samples are seen, upon loading, to assume a firmness characterized by an increase in the stress amplitude and a reduction in the alternating plastic deformation. Using resonance frequencies and small deformation amplitudes

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ACCESSION NR: AP4017930

(epsilon$_a$ = 10^{-7} to 10^{-6}), the authors measured in the various loading phases only a growth in the damping parallel to the softening measured. In samples annealed in a moist-hydrogen atmosphere the damping dropped rapidly in the initial stage of loading, but rose again after reaching a minimum following a very small number of cycles (N = 2.5. 10^2 to 10^4). Both processes take place in the strengthening area. Considering models for dislocation damping in comparison with changes in damping after static deformation of monocrystal and polycrystal materials, they found that with small deformation amplitudes the decrease and increase in damping can be related to the increase in the dislocation density with different degrees of plastic deformation. From the differences in the courses of damping in the higher stages of loading of samples with different C + N contents, one may draw conclusions about the aging processes taking place in cyclic deformation. The measurements showed that the rate of growth of the logarithmic decrement in the initial loading stages is directly proportional to the logarithm of the number of cycles before failure, which indicates that the damping rate can be related to the increase in the density of the slide zones, some of which are nucleation points of cohesion failure. Original has 15 graphs, 1 diagram and 3 equations.

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ACCESSION NR: AP4017930

ASSOCIATION: Ustav vlastnosti kovu CSAV, Brno (Establishment for the Properties of Metals of the Czechoslovak Academy of Sciences)

SUBMITTED: 26May63 DATE ACQ: 12Mar64 ENCL: 00

SUB CODE: ML NO REF SOV: 000 OTHER: 020

Card 3/3

KLESNIL, Mirko

Microplastic deformation and the fatig e of metals.
Vestnik CSAV 73 no. 1: 117-'18 '64.

RYS, P.; KLESNIL, M.; CERNOHORSKY, M.; HABROVEC, F.

Interpretation of the results of the study of carbon steel extraction replicas. Hut listy 19 no.5:349-358 My '64

1. Institute of Metal Properties, Czechoslovak Academy of Sciences, Brno.

L 45421-66 T/EWP(t)/ETI IJP(c) GG/JD

ACC NR: AP6026376 (N) SOURCE CODE: CZ/0030/66/015/001/0071/0082

AUTHOR: Lukas, P.; Klesnil, M.; Krejci, J.; Rys, P.

ORG: Institute of Metallurgy, Czechoslovak Academy of Sciences, Brno

TITLE: Substructure of persistent slip bands in cyclically deformed copper

SOURCE: Physica status solidi, v. 15, no. 1, 1966, 71-82

TOPIC TAGS: deformed copper, polycrystalline copper, dislocation distribution, dislocation density, surface extrusion, slip, slip band

ABSTRACT: The dislocation distribution on the surface layer of cyclically deformed specimens of polycrystalline copper is studied by means of transmission electron microscopy of thin foils, both parallel and nonparallel to the surface. The distribution within the surface layer and near the persistent slip bands is found to differ considerably from that inside the specimens. The persistent slip bands consist of zones of alternately high and low dislocation density. The zones of high density are linked together at a particular depth below the surface. The zones of

Card 1/2

ACCESSION NR: AP4044594 Z/0055/64/014/008/0600/0607

AUTHOR: Lukas, P.; Klesnil, M.

TITLE: Dislocation arrangement during cyclic loading of pure iron

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 14, no. 8, 1964, 600-607; 656a-656k

TOPIC TAGS: pure iron fatigue, pure iron fatigue mechanism, pure iron strain hardening, fatigue dislocation mechanism, fatigue induced substructure, dynamic recovery

ABSTRACT: Flat specimens of high-purity (99.95%) vacuum-melted iron were subjected to push-pull cyclic loads with an amplitude of 10.3 kp/mm^2 at a frequency of 2800 cycles per minute with a periodical electron microscope observation. It was found that the dislocation density increased sharply during the first 10 cycles (see Fig. 1 of the Enclosure) when the first dislocation loops were observed. A certain pattern in the distribution of dislocation, i.e.,

Card 1/3

L 10536-65
ACCESSION NR: AP4044594

dislocation bands, became apparent after the first 200 cyles, during which the number of dislocations continuously increased. The banding became more and more pronounced with increasing cycle numbers. Simultaneously, the density of dislocation between the bands progressively decreased. No increase in the total number of dislocations was observed. After 340,000 cycles, well-developed dislocation bands were observed with only a few dislocations remaining between the bands. No further changes in the distribution of dislocations occurred until the failure of the specimen after 1,000,000 cycles. The strain hardening was completed in the first 20 cycles. This indicates that strain hardening does not depend solely on the density and distribution of dislocation. The dynamic recovery period, after 200 cycles, when the distribution but not the number of dislocation changes, is explained by cross slip. Orig. art. has: 16 figures.

ASSOCIATION: Institute of Metallurgy, Czech. Acad. Sci., Brno

SUBMITTED: 13Jan64 ATD PRESS: 3111 ENCL: 01

SUB CODE: MM, SS NO REF SOV: 000 OTHER: 019

Card 2/3

L 10536-65

ACCESSION NR: AP4044594

ENCLOSURE: 01

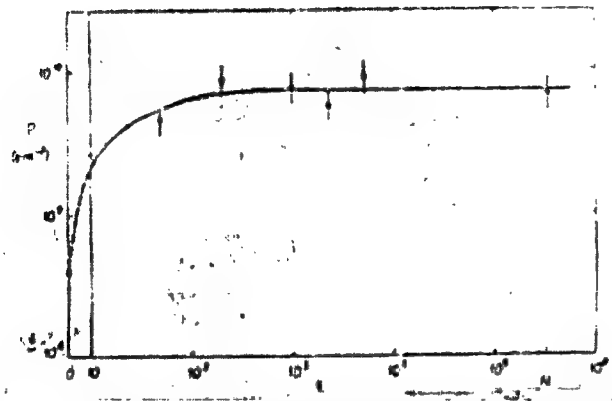


Fig. 1. The average density of dislocations ρ vs. number of cycles N

3/3

Card

KLESNIL, Svatopluk; podplukovnik, MUDr.

Pterygium colli and muscle hypotrophy in primary hypogonadism.
Voj. zdrav. listy 34 no.2:59-62 Ap '65

1. Vojenska nemocnice v Olomouci.

KLESOV, M.D.

"Phenothiazine-a New Anthelmintic Against Strongylosis and Trichonemato-diasis in Horses," M.D. KLESOV, Candidate of Veterinary Science, and Z.O. Popova, Candidate of Veterinary Science, Ukrainian Institute of Experimental Veterinary Medicine, 3 pp.

Describes experimental treatment of horses suffering from subject parasitic diseases. Four hundred and seventy horses whose ages varied from 5 to 15 years were divided into three groups, receiving phenothiazine doses of 0.06, 0.1 and 0 gm kilo. ([redacted]74T77)

SO:Veterinariya;No.4;Apr 1948 uncl deg

KIESOV, M. D.

PA 66/49160

Epizootiology and Therapy of Tuberculosis in Large Horned Cattle," M. D. Kiesov, Cand Vet Sci, Ukrainian Inst of Experimental Vet Sci, 1 p

Vet', No 4

Describes incidence and development of this disease in two groups of Ukr'kuy cattle. A 12,000 iodine solution proved to be a reliable treatment. Since the watering of animals in the communities is the source of infection of the disease, animals should be watered in the [illegible] and the [illegible] should be [illegible] to this disease.

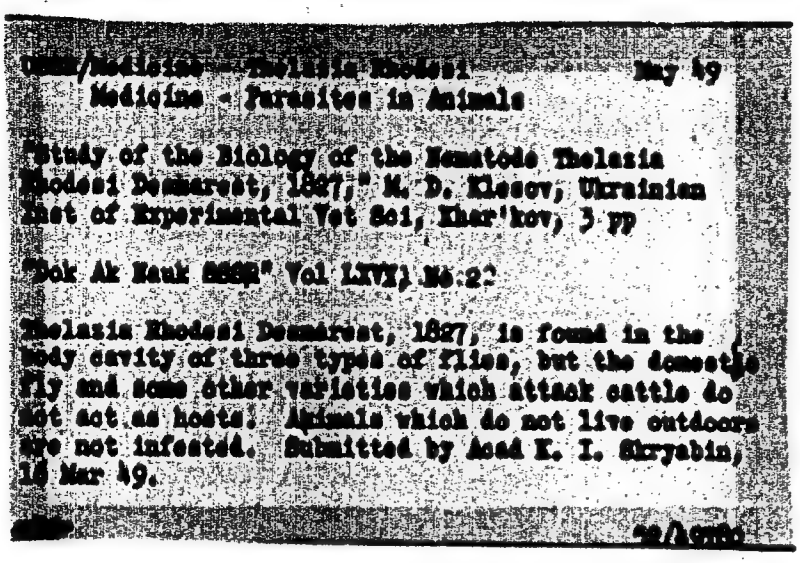
66/49160

KLESOV, M.D.

36371 Issledovaniye biologii nematody thelazia rhodesi desm. Zool. Zhurnal, 1949 Vyp. 6, S. 515-22--Bibliogr: 11 Nazv.

SO: Letopis' Zhurnal'nykh Statey, No. 49, 1949

KLESOV, M. D.



USSR/Medicine - Thelazia Rhodesi May 49
Medicine - Parasites in Animals

"Study of the Biology of the Nematode Thelazia Rhodesi Desmarest, 1827," M. D. Klesov, Ukrainian Inst of Experimental Vet Sci, Khar'kov, 3 pp

"Dok Ak Nauk SSSR" Vol LXVI, No 2

Thelazia Rhodesi Desmarest, 1827, is found in the body cavity of three types of flies, but the domestic fly and some other varieties which attack cattle do not act as hosts. Animals which do not live outdoors are not infested. Submitted by Acad K. I. Skryabin, 18 Mar 49.

Glistnyye zabolevaniya sel'skokhozyaystvennykh zhivotnykh (Helminthous Diseases of Farm Animals). Kiev-Khar'kov, 1959 72 pages with illustrations. In the Ukrainian language.

U-4258

1. KLESOV, M. D.

2. USSR (600)

4. Nematoda

7. Further study of the biology of nematodes of the genus Thelazia Bosc, 1819. Nauch, trudy UIEV, 1951.
18

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

KLESOV, M. D.
Ukrainian Inst. of Exptl. Vet. Med.
"On the problem of the biology of nematodes of the genus Thelazia Bosc, 1819."
SO: Veterinariia 28(2), 1951, p. 22

KLESOV, M. D.

K izucheniyu epizootologii telyazioza krupnogo rogatogo skota, "Works on Helminthology" on the 75th Birthday of K. I. Skryabin, Izdat. Akad. Nauk. SSSR, Moskva, 1953, page 313

Ukrainian Institute for Experimental Veterinary Medicine

USSR / Diseases of Farm Animals. Diseases Caused by Helminths. R-2

Abs Jour: Ref Zhur-Biol., No 2, 1958, 7335.

Author : ~~M. D. Kiesov~~, Z. G. Popova.
Inst : Not Given
Title : Development of Methods of Prophylaxis Against "Dicroceliasis" of Sheep.

Orig Pub: Nauchn. tr. Ukr. in-ta. eksperim. vet. 1956, 23, 261-279.

Abstract: On inspection of pastures where cases of "dicroceliasis" had been observed, 19 species of terrestrial mollusks were identified; six species of mollusks from this kol'khoz are intermediate hosts to Dicrocelium lanceatum. In the fight against the teresstrial mollusks, superphosphate, kainite, ammonium sulfate, potassium and sodium nitrate, straw furnace ashes, five and ten percent

Card 1/2

USSR / Diseases of Farm Animals. Diseases Caused by Helminths. R-2

Abs Jour: Ref Zhur-Biol., No 2, 1958, 7335.

Abstract: "dust" of hexachloride were used. All the methods tested proved ineffective. The biological method of destroying the mollusks based on the keeping of chickens in the field proved highly effective; by the twentieth of the keeping of chickens on the pasture they had destroyed up to 97.5 percent of the mollusks, including the intermediate hosts D. lanceatum. Eighteen species have been classified.

Card 2/2

KLESOV, M.D., doktor veterinarnykh nauk; POPOVA, Z.G., kandidat veterinarnykh nauk.

Measures for preventing dicrocoeliasis in sheep. Veterinariia 33 no.6:36-39 Je '56. (MLRA 9:8)

1. Ukrainskiy institut eksperimental'noy veterinarii.
(Parasites--Sheep) (Trematoda)

USSR/Diseases of Farm Animals. Diseases Caused by Helminths. R

Abs Jour: Ref Zhur-Biol., No 15, 1958, 69484.

Author : Klesov, M. D.
Inst :
Title : The Change of Pastures and Water Sources in the Fight Against Fascioliasis in Sheep.

Orig Pub: Veterinariya, 1957, No 7, 25-29.

Abstract: The author describes in detail the measures carried out in the pasture season of 1956 for the control of fascioliasis of sheep in the western oblasts of the Ukrainian SSR. During this period, in the kolkhozes affected by fascioliasis the pasturing places were changed once, and in fewer kolkhozes - twice, with simultaneous sanitizing of water sources and watering places or changing to

Ukr. Sci Res Inst. Exptl. Vet.

Card : 1/3

16

COUNTRY : USSR
CATEGORY : Zooparasitology. Parasitic Worms. General Problems

ABS. JOUR. : RZhBiol., No. 4 1959, No. 14960

AUTHOR : Klesov, M.D.; Popova, Z.G.
INST. :
TITLE : The Problem of Biology of Dicrocoelium lanceatum (Stiles et Hassal, 1896), the Causative Agent of Dicrocoeliasis of Ruminants
ORIG. PUB. : Zool. zh., 1958, 37, No.4, 504-510

ABSTRACT : Upon investigation of 20,350 ants (A) collected on virgin pastures of the forest-steppe zone of Ukraine, unsafe in regard to dicrocoeliasis, it was established that a second intermediate host of Dicrocoelium lanceatum is Formica pratensis. In two other species of A, Lasius niger and Polyergus rufescens, encountered during collection, no encysted metacercariae were found. The average intensiveness of the invasion of A increased

CARD: 1/2

Dept. Helminthology, Ukr. Inst. Exptl. Veterinary, Kharkov

KLESOV, M.D., doktor veter. nauk

Ridding farms of fascioliasis in the Ukrainian S.S.R. Veterinariia no.12:4-6 D '63. (MIRA 17:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii.

KLESOV, M. D.

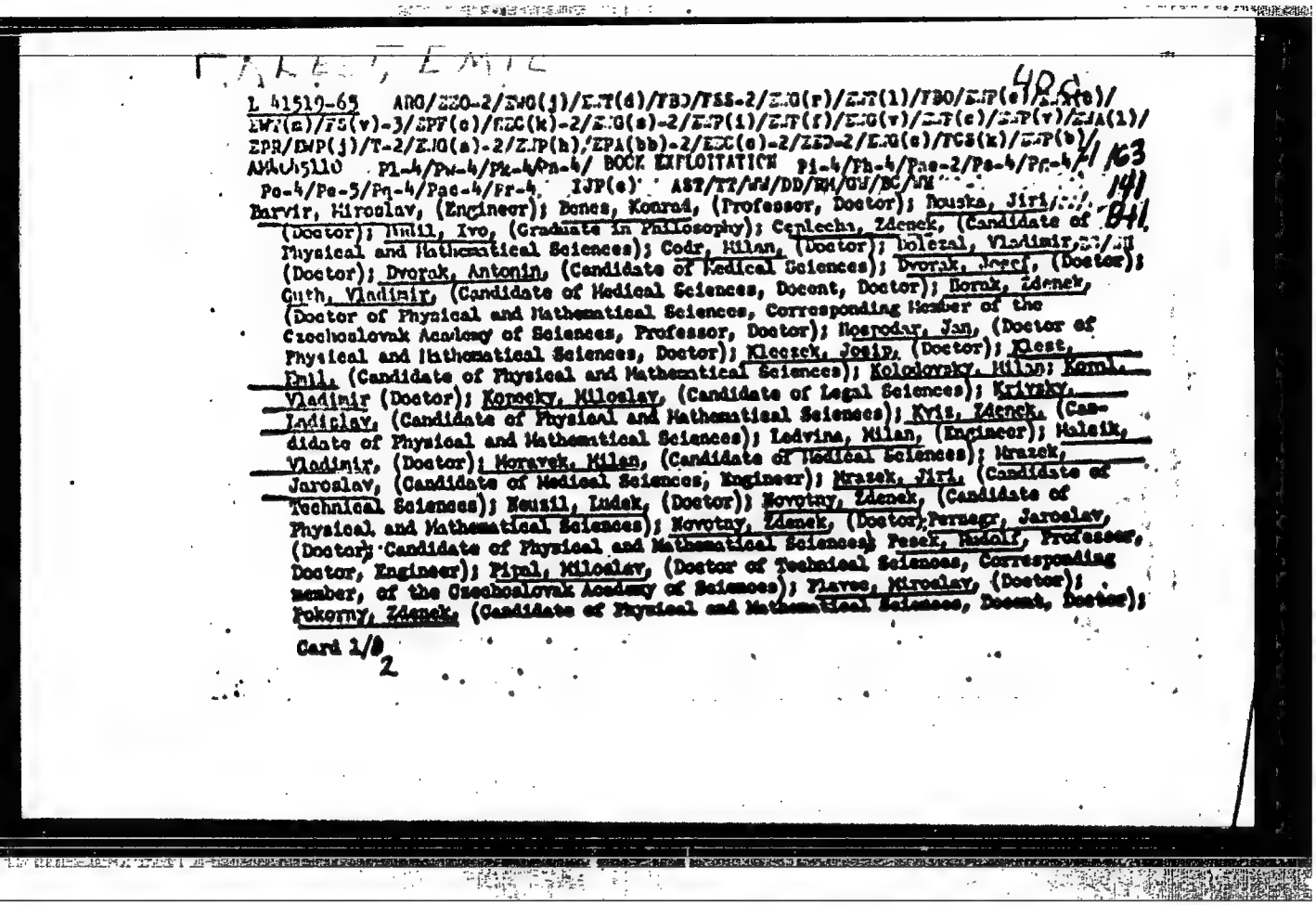
"Bovine onchocercosis."

report submitted for 1st Intl Cong, Parasitology, 21-26 Sep 1964.

Ukrainian Inst of Experimental Veterinary Medicine, Khar'kov.

FRIDMAN, Ya.D.; KLESOV, M.M.

Obtaining alumina from syenites. Izv.AN Kir SSR.Ser.est.i tekh.nauk 2 no.2:137-146 '60. (MIRA 14:10)
(Syenite) (Alumina)



PAREL, EMIL

L 41519-65 ARO/EEO-2/EWG(j)/EWT(d)/FBD/TSS-2/EWG(r)/EWT(l)/TBO/EWP(e)/EWA(c)/EWA(m)/FS(v)-3/SPF(c)/EEC(k)-2/EWG(a)-2/EWP(t)/EWT(f)/EWG(v)/EWT(c)/EWP(v)/EWA(l)/EPR/EWP(j)/T-2/EWG(a)-2/EWP(h)/EPA(bb)-2/EEC(c)-2/EED-2/EWG(c)/FCS(k)/EWP(b)/AMA(h)5110 Pl-4/Pu-4/Pz-4/Pn-4/ BOOK EXPLOITATION Pi-4/Ph-4/Pae-2/Pe-4/Pr-4/Po-4/Pe-5/Pq-4/Pac-4/Pr-4 IJP(c) AST/TT/MJ/DD/RM/GG/BC/MK

406

Barvir, Miroslav, (Engineer); Benes, Konrad, (Professor, Doctor); Bouska, Jiri, (Doctor); Hnilo, Ivo, (Graduate in Philosophy); Ceplecha, Zdenek, (Candidate of Physical and Mathematical Sciences); Codr, Milan, (Doctor); Dolezal, Vladimir, (Doctor); Dvorak, Antonin, (Candidate of Medical Sciences); Dvorak, Josef, (Doctor); Guth, Vladimir, (Candidate of Medical Sciences, Docent, Doctor); Horak, Zdenek, (Doctor of Physical and Mathematical Sciences, Corresponding Member of the Czechoslovak Academy of Sciences, Professor, Doctor); Hosprodar, Jan, (Doctor of Physical and Mathematical Sciences, Doctor); Kleczek, Josip, (Doctor); Klest, Emil, (Candidate of Physical and Mathematical Sciences); Kolesovsky, Milan; Koml, Vladimir (Doctor); Koresky, Miloslav, (Candidate of Legal Sciences); Krivsky, Ladislav, (Candidate of Physical and Mathematical Sciences); Kvis, Zdenek, (Candidate of Physical and Mathematical Sciences); Ledvina, Milan, (Engineer); Malsik, Vladimir, (Doctor); Moravek, Milan, (Candidate of Medical Sciences); Mrazek, Jaroslav, (Candidate of Medical Sciences, Engineer); Mrazek, Jiri, (Candidate of Technical Sciences); Neuzil, Ludek, (Doctor); Novotny, Zdenek, (Candidate of Physical and Mathematical Sciences); Novotny, Zdenek, (Doctor); Persagr, Jaroslav, (Doctor, Candidate of Physical and Mathematical Sciences); Pesek, Rudolf, Professor, Doctor, Engineer); Pipal, Miloslav, (Doctor of Technical Sciences, Corresponding member, of the Czechoslovak Academy of Sciences); Plavec, Miroslav, (Doctor); Pokorny, Zdenek, (Candidate of Physical and Mathematical Sciences, Docent, Doctor);

Card 1/2

L 41519-65
AM4045110

14

Ruml, Vladimir, (Candidate of Medical Sciences, Doctor); Sodil, Josef, (Doctor of Physiological Sciences); Schnal, Ladislav; Stvrtnik, Jiri, (Doctor); Svestka, Zdenek, (Doctor); Tuma, Jaroslav, (Candidate of Physical and Mathematical Sciences, Doctor); Tysl, Vaclav, (Docent, Engineer); Vlcbla, Ivan, (Candidate of Technical Sciences, Professor, Doctor); Valnicek, Doris, (Candidate of Physical and Mathematical Sciences, Doctor); Vanycek, Vladimir, (Candidate of Physical and Mathematical Sciences, Docent, Doctor); Vlasak, Marian, (Candidate of Physical and Mathematical Sciences; Doctor); Voda, Miloslav, (Engineer)

Principles of astronautics (Zaklady kosmonautiky) Prague, Orbis, 1964. 445 p. illus., biblio. 5000 copies printed.

TOPIC TAGS: cosmonautics, rocket, satellite, space flight, missile

PURPOSE AND COVERAGE: This publication is a popular scientific reference book for people working in cosmonautics. The book presents a survey of cosmonautics and space flight up to 1 June 1963.

TABLE OF CONTENTS:

Card 2/3

POLAK, H.; HERICHA, Vl.; KLESTIL, Fr.; BARTEJS, J.

Volumetric and morphological changes in blood cells of workers employed in mining and processing of radioactive raw materials. Prac. lek. 14 no.9:413-420 N '62.

1. Ustav hygieny prace a prevence chorob z povolani, Jachymov.
(URANIUM) (MINING) (BLOOD CELLS)
(OCCUPATIONAL DISEASES)

CZECHOSLOVAKIA

Polak, M., MD; MERICHA, V; KUBAT, M; KLIKA, J; KLESTIL, F; BARTEJS, J; KALALOVA, D.

Institute of Public Health (Ustav narodniho zdravi), Jachymovske doly (for all)

Prague, Praktickly lekar, No 16, 1963, p 628

"The Study of Morphological and Functional Condition of Blood and Marrow Elements of the Workers in the Jachymov Mines."

(7)

TOBERNY, Z.; KLESTIL, J.

Hemorrhage into the biliary pathways. Cesk. gastroent. vyz. 15 no.8: 590-592 D '62.

1. II. chirurgicka klinika KU, Praha, prednosta prof. J.Lhotka Chirurgicke oddeleni nemocnice M. Nedveda, Praha 5, prednosta dr J. Smetana.

(CHOLECYSTECTOMY compl) (BILIARY TRACT diseases)
(HEMORRHAGE case reports)

KLESHOV, D.S.

KHRENNIKOV, N.S.

"Equipment in the Leather Industry." S.M.Ershov, D.S.Kleshov. Reviewed by N.S.Khrennikov. Leg.prom.15 no.7:56-57 Jl '55. (MLRA 8:10)

(Leather industry--Equipment and supplies)

1. KLESTOV, M. V.

2. USSR (600)

4. Machine-Tractor Stations - Accounting

7. Coefficients for transposing tractor operations into hectares of soft plowing, Les Khoz., 6,no. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KLESTOV, M. V.

KLESTOV, M. V. -- "The History and Experience of Steppe Forest Cultivation on the Don Leskhoz." Min Higher Education USSR. Novocherkassk, 1955. (Dissertation for the Degree of Candidate in Agricultural Sciences).

So: Knizhnaya letopis', No 8, 1956, pp 97-103

BESSONOV, K.A.; BONDAREV, Yu.Ye.; KLESTOVA, T.F.

Anisotropy of mechanical properties in cold-rolled aluminum. Trudy Khim.-met.inst.Sib.otd.AN SSSR no.14:159-162 '60. (MIRA 14:10)
(Aluminum--Cold working)

L 11316-65 EWT(m)/EWP(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b) Pf-4 AFETR/ASD(m)-3
WW/RD/WH

ACCESSION NR: AP4047011 S/0135/64/000/010/0006/0009

AUTHOR: Lyubavskiy, K. V. (Doctor of technical sciences); Rad'yanov, B. N. (Engineer); Klestova, Z. D. (Engineer)

TITLE: Selection of flux for [submerged-arc] welding of a super-strength steel

SOURCE: Svarochnoye proizvodstvo, no. 10, 1964, 6-9

TOPIC TAGS: superstrength steel, superstrength steel welding, submerged arc welding, submerged arc welding flux, superstrength steel weld, weld property

ABSTRACT: Several fluxes have been tested in submerged-arc welding of the 25KhSNVFA superstrength steel. The most satisfactory results were obtained with the experimental oxygen-free AV-4 flux. This flux was found to be the least active, and the loss of alloying elements was insignificant, lower than in argon shielded-arc welding. The oxygen content of the weld was lower than that of the base metal. The content of nonmetallic inclusions was comparable to that in argon-shielded arc welding. The weld metal deposited with the 20KhSNVFA electrode

Card 1/2

L 12016-65
ACCESSION NR: AP4047011

wire, and AV-4 flux had a tensile strength of 101.0—105.0 kg/mm^2, about the same as that of the weld metal deposited with other fluxes or with an argon-shielded arc, but the ductility characteristics of the former were considerably higher: elongation, 18—20%; reduction of area, 48.0—57.5%; and notch toughness, 7.4—10.2 mkg/cm^2. Heat treatment which brought the strength of the base metal to a level of 120—140 kg/mm^2 raised the strength of the weld metal to 117.5—157.2 kg/mm^2 and the yield strength to 111.4—146.4, at an elongation of 6.0—7.5%, a reduction of area of 43.2—58.1%, and a notch toughness of 8.4—11.3 or 5.4—8.0 mkg/cm^2 at room temperature and -78C, respectively. Orig. art. has: 7 tables and 5 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 010 OTHER: 001 ATD PRESS: 3133

Card 2/2

KLESTOV-NADEYEV, A.N., insh.

Evaluation of recording error in telemetering systems; increase in the quality of recording by a method which involves stopping of the beam. Trudy MRI no.31:204-224 '56 (MIRA 13:3)
(Telemetering)

AVS

551.508.43:551.501.42

3.5-62

Klestova, M.M., Pogreshnosti popravok aneroidov, primeniaemykh na seti meteorologicheskikh stantsii. (Errors in corrections to aneroid barometers used at meteorological stations.) Leningrad, Glavnaia Geofizicheskaia Observatoriia, Trudy, No. 25(87):27-36, 1951. 7 tables. DLC- The author discusses the errors in the temperature, scale and general corrections that are made for the old model aneroid barometers which hadian external spring and the newer models lacking a spring. Tables of each type of correction with standard weeces are given. Subject Headings: 1. Aneriod barometers 2. Instrumental errors. - T.L.D.

KLESTOVA, M.M., mladshiy nauchnyy sotrudnik; POKROVSKAYA, I.A., starshiy nauchnyy sotrudnik, redaktor; PLAUM, M.Ya., tekhnicheskiy redaktor

[Manual on the adjustment of meteorological instruments] Rukovodstvo po regulirovke meteorologicheskikh priborov. Leningrad, Gidrometeorologicheskoe izd-vo, 1956. 33 p. (MLRA 9:8)

1. Leningrad. Glavnaya geofizicheskaya observatoriya. 2. Glavnaya geofizicheskaya observatoriya im. A.I.Voyeykova. (for Klestova, Pokrovskaya)
(Meteorological instruments)

21634

S/137/61/000/003/051/069
A006/A101

18.8200 1138, 1413 [redacted]

AUTHORS: Bessonov, K. A., Bondarev, Yu. Ye., and Klestova, T. P.

TITLE: Anisotropy of mechanical properties in cold rolled aluminum

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 3, 1961, 28, abstract 3Zh176 ("Tr. Khim.-metallurg. in-ta, Sib. otd. AN SSSR", no. 14, 1960, 159-162)

TEXT: An investigation was made on cold rolled 10-mm thick Al bars of rectangular section. It was shown, from imprints made on the bar surface with a 10-mm diameter ball and from the cracking of the brittle varnish coating covering the surface, that cracking occurred mainly at an angle of 45° in respect to the axis of rolling. It was established that maximum cold hardness of Al is found in the longitudinal direction, the least at the 45° angle to the axis of rolling, and that annealing at 540°C for 24 hours did not eliminate completely the anisotropy of the properties. It is noted that already at relatively low plastic deformations the round section of the specimens transforms into an oval one, whereby the difference between the axes of the oval increases with greater deformation and attains a maximum in the journal at the moment of rupture. The

Card 1/2

Anisotropy of mechanical properties ... S/137/61/000/003/051/069
A006/A101

authors analyze the figures of pressure from a pointed needle on the section planes differently oriented in respect to the rolling direction.

P. Z.

[Abstractor's note: Complete translation.]

KLESYK, Barbara; MODELSKI, Wojciech

Rupture of dermoid cyst into urinary bladder. Gin. polska 28 no. 5:567-570 Sept-Oct 56.

1. Z Oddzialu Ginekolgicznego P.S.K. w Krakowie, Ordynator: dr. A. Konstantynowicz, i z Oddzialu Urologicznego P.S.K. w Krakowie Ordynator: prof. dr. M. Michalowski, dr. Wojciech Modelski-- Krakow, Krowoderska 26 m. 10.

(BLADDER, neoplasms
dermoid cyst, rupt. into bladder, surg. (Pol))
(TERATOMA
bladder, cystic, rupt. into bladder, surg. (Pol))

MODELSKI, Wojciech; KLESYK, Barbara

Case of primary endometriosis of the urinary bladder. Gin. polska 28 no.5:593-597 Sept-Oct 56.

1. Z Oddzialu Urologicznego Panstwowego Szpitala Klinicznego A.M. w Krakowie. Ordynator: prof. dr. M. Michalowski Z Oddzialu Ginekologicznego Panstwowego Szpitala Klinicznego A.M. w Krakowie Ordynator: prymarjusz dr. A. Konstantynowicz. Wojciech Modelski-Krakow, ul. Krowoderska 26.

(BLADDER, diseases
endometriosis vesicae with kidney abnorm., surg. (Pol))
(ENDOMETRIOSIS, surgery
vesicae with kidney abnorm. (Pol))
(KIDNEYS, abnormalities
crossed dystopia of left kidney, with endometriosis vesicae, surg. (Pol))

[redacted] I.

Stanowski, J., Cisek, A., Gutwinski, S., Wilkon, B., Wappert, Z., Bozek, K., Dobrzynska, J., Cieszczykiewicz, E.
Miejskiego Zaklad Badan Serca, Krakow. *Niewydolnosc wiecowa insufficiency and heart infarct from the social - clinical and statistical points of view
POL. ARCH. MED. WEWNET. 1954, 24/2 (225-239) Graphs 2 Tables 5

Coronary circulation disorders appear primarily in occupations with a preponderance of mental work but also in occupations, subject to harmful environmental influences resulting from an abnormal mode of living and working. These influences, disturbing the higher function of the nervous system, are important causal factors in coronary disease.
Authors

So: Excerpta Medica, Vol. 1, No. 2, Section XVII, February 1955

KLESZCZELSKI, Arno

Case of prostatic cancer with metastases to inguinal lymph nodes and preputial skin. Urol. polska 9:73-75 1956.

1. Z III Kliniki Chirurgicznej A.M. w Lodzi, Kierownik: prof. dr. W. Tomaszewicz.

(PROSTATE, neoplasms,
metastatic to prepuce & inguinal lymph nodes (Pol))
(LYMPH NODES, neoplasms,
inguinal metastases from prostate (Pol))
(PENIS, neoplasms,
preputial metastases from prostate (Pol))

KLESZCZEWSKI, Arno

Professor Wincenty Tomaszewicz, a profile of a scientist and social worker. Polski przegl.chir. 31 no.12:1281-1282 D '59.

(BIOGRAPHIES)

KLESZCZYŃSKI, Arno; CIEŚLIŃSKI, Stanisław

Remote results of Puigvert's operation. Polski przegl.chir. 31 no.12:1349-1356 D '59.

1. Z III Kliniki Chirurgicznej A. M. w Łodzi Kierownik: prof. dr W. Tomaszewicz Z Kliniki Urologicznej W.A.M. Kierownik: doc. dr J. Lenko.

(TUBERCULOSIS UROGENITAL surg)

KLESZCZELSKI, Arno

Primary cancer of the male urethra. Polski przegl.chir. 31 no.12:1357-1360 D '59.

1. Z III Kliniki Chirurgicznej A. M. w Lodzi Kierownik: prof. dr.W. Tomaszewicz.
(PENIS neopl)

WLESZCZEWSKI, K.

More about aviation clubs. p. 10, Vol. 11, no. 21, May 1955, SKRZYDLATA POLSKA

SO:MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, (EEAL), LC, Vol. 4, No. 9, Sept. 1955, Uncl.

KLETCHENKO, A. V. DECEASED '57

Animal Breeding see ILC

AN NEMKOVA, V.Z.; POLUBENTSEV, A.V.; FEDYUKOV, M.A.; KLETS, A.YE.; BRIZON, L.P.

Effect of the addition of lime on the quality of metallurgical coke from Irkutsk Basin coals containing several sulfides. Izv. Sib. otd. AN SSSR no. 10:24-27 '60. (MIRA 13:12)

1. Vostochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR. (Lime) (Coke)

AUTHOR: Kletchenkov, I.I. SOV-21-58-9-7/28

TITLE: Device for Measuring Adhesion of Lacquer Insulation (Pribor dlya izmereniya adgezii izolyatsionnykh lakovykh pokrytiy)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 9, pp 943 - 945 (USSR)

ABSTRACT: It is known, that the magnitudes of an initial effort for separating a lacquer film from metal (statical force) and an effort to continue this separation (dynamical force) are different. Existing dynamometers are suitable only for measuring dynamical efforts. The author, in improving the method of measuring the adhesion of lacquer insulation to metal surfaces, has designed a special, electromechanical adhesion meter, which makes it possible to measure both statical and dynamical efforts. This device consists of a high-frequency generator, an oscillation circuit and a lamp voltmeter. The capacitance of the oscillation circuit can vary under the action of a mechanical load, as e.g. the separation effort of the lacquer foil, and this circuit functions therefore as a pickup of the quantity to be measured. The range of efforts

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which can be measured with this adhesion meter is from 0.25 g to 2 kg. The author recommends the method of detachment of foil from a film on a "net", which makes it possible to apply this device for measuring adhesion of lacquer insulation materials with very different physico-chemical properties. There are: 1 graph, 1 circuit and 1 diagram.

ASSOCIATION: Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnic Institute)

PRESENTED: By Member of the AS UkrSSR, K.K. Khrenov

SUBMITTED: March 18, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Insulation--Adhesion 2. Varnishes--Mechanical properties
3. Mathematics

7(6), 15(7)

AUTHOR: Kletchenkov, I. I. SOV/32-24-11-20/37

TITLE: Method for Determining the Adhesion of Lacquer to Metallic Surfaces (Metod opredeleniya adgezii lakovykh pokrytiy k metallicheskim osnovaniyam)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 11, pp 1376 - 1377 (USSR)

ABSTRACT: The lacquer film is placed upon a well polished metal foil (Al, Sn, Cu etc., 20-30 μ thick) from which all grease and fats have been removed. The force necessary to remove the film (i.e., the adhesion) from the under surface is measured by a special electro-mechanical adhesiometer. In order to "anchor" the lacquer film a glass cloth (Trade mark 88A-40) was placed over the metal foil before the coat of lacquer and was attached to the foil in a frame. The thermal treatment of the metal foil was carried out in the usual manner. After cooling the lacquer film on the foil, strips 4-6 mm wide were cut and the strength of adhesion measured on the adhesiometer. This latter

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instrument has a high frequency generator and tube voltmeter of the type LV9-2. The apparatus permits an automatic calculation of the adhesion plot. The adhesion of the following materials was determined: gluten EF-2, lacquer Nr 302, lacquer "vinifleks" (VL-7), lacquers 1154 and 460, the silico-organic lacquers K-47, K-44, L-54, K-50, K-55, K-56, K-57, EF-1, EF-3, FG-9, and many more. The adhesion of the "vinifleks" (VL-7) film did not vary after heat treatment at 70° for 20 minutes. According to the adhesion theory of B.V.Deryagin (Ref 1) it can be assumed that the adhesion of the lacquer film depends to a great extent upon the presence of a solvent in the film. This assumption is confirmed throughout the course of the plot showing the decrease in weight as a function of the time of thermal treatment.There are 4 figures and 1 Soviet reference.

Method for Determining the Adhesion of Lacquer to Metallic Surfaces SOV/32-24-11-2o/37

ASSOCIATION: Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnical Institute)

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AUTHOR: Kletchenkov, I.I. (Engineer) SOV/110-58-8-4/26

TITLE: The Adhesion Properties of Vinyflex Lacquer (Adgeziomnyye svoystva laka vinifleks)

PERIODICAL: Vestnik Elektropromyshlennosti,1958,Nr 8,pp 10-12 (USSR)

ABSTRACT: This article describes a study of the adhesion of vinyflex lacquer VL-7 to an aluminium surface. The test pieces consisted of polished degreased foil of aluminium or copper, 20 - 30 microns thick, to one side of which a piece of glass gauze grade SSA-40 is applied before coating with lacquer. The foil and gauze are mounted in a special frame, as shown in Fig 1 and two coatings of lacquer are applied. The viscosity of the lacquer is so chosen that after two coatings the holes in the glass gauze are fully filled up; then the specimen is baked in the usual way. Next the foil is cut into strips 4 - 6 mm wide, and one edge of the lacquer film is lifted with a razor blade. The foil and film are fixed in a special holder and pulled apart at an angle of 180°. The adhesion of the film is assessed in terms of the mean force required to separate it from the foil. The operation is performed on an

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electro-mechanical adhesiometer, the electrical circuit of which is shown schematically in Fig 2. The operating principles and method of calibrating the equipment are briefly described. Curves of film adhesion as a function of baking time are given in Fig 3 for various temperatures. The adhesion is increased by increasing the temperature or the baking time. The relationship between film adhesion and baking temperature for constant baking times of 30 minutes is shown in Fig 4. The marked rise in the curve over the temperature range 120 - 140°C occurs because the boiling point of the vinyflex lacquer solvent lies in this range. Films of different thickness were prepared by increasing the number of coatings; curves of adhesion as a function of thickness are given in Fig 5. The adhesion increases with thickness, although other authors have found an opposite effect,

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the reasons for which are discussed. This method of determining film adhesion can be applied to elastic and brittle films, and can be used with a wide range of lacquer coatings.

There are 5 figures and 1 Soviet reference.

SUBMITTED: December 9, 1957

1. Varnishes--Adhesion

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KLETCHENKOV, I. I.: Master Tech Sci (diss) -- "A method of determining adhesion and an investigation of the adhesive properties of organosilicon coverings". Kiev, 1959. 11 pp (Min Higher Educ Ukr SSR, Kiev Order of Lenin Polytech Inst, Chair of Dielectrics and Semiconductors), 100 copies (KL, No 16, 1959, 108)